(12) UK Patent Application (19) GB (11) 2 361 460 (13) A

(43) Date of A Publication 24.10.2001

(21) Application No 0005802.4

(22) Date of Filing 11.03.2000

(71) Applicant(s)
Kevin James Phelps
8 The Swallows, Locking Castle West,
WESTON SUPER MARE, Somerset, BS22 8LR,
United Kingdom

Roger Phelps
10 Paddock Park Homes, Worle,
WESTON SUPER MARE, Somerset, BS22 6BW,
United Kingdom

(72) Inventor(s)
Kevin James Phelps
Roger Phelps

(74) Agent and/or Address for Service
Roger Phelps
10 Paddock Park Homes, Worle,
WESTON SUPER MARE, Somerset, BS22 6BW,
United Kingdom

(51) INT CL[7]
B62D 63/06

(52) UK CL (Edition S)
B7B BCHB BTF2 B343 B378

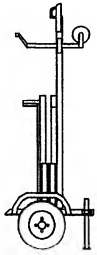
(56) Documents Cited
GB 2279624 A GB 2266074 A GB 2251827 A
GB 0498604 A EP 0025196 A1 US 5676508 A
US 5607176 A

(58) Field of Search
UK CL (Edition R) B7B BCHB BTC BTF2 BTL2 BTX2
INT CL[7] B62D 63/00 63/06
ONLINE: WPI, EPODOC, JAPIO

(54) Abstract Title
Folding trailer

(57) A collapsible trailer for towing behind a vehicle comprises a wheeled centrally located chassis to which are attached floor panels which hinge vertically upwards so as reduce the amount of space required to store the trailer. The side and end panels are hingedly attached to the floor panels so that prior to storing the trailer catches are released thus allowing the side and end panels to be folded flat on the floor panels. The floor panels are then released from their in use position before being retained along with the side and end panels in an upright position by means of catches. The trailer may be moved to its storage location when in the collapsed state. When in the storage location two drop down legs may be utilised to help stabilise the trailer. The trailer may have two wheels, suspension, a towing bar, lighting board and a third 'jockey' wheel located on the towing bar, and the chassis and panels may be constructed from galvanised steel.

Figure 2



GB 2 361 460 A

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

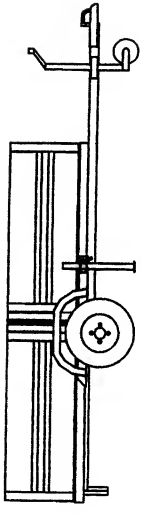
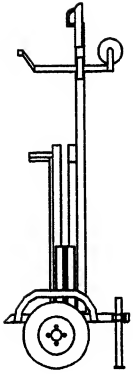


Figure 1

Figure 2



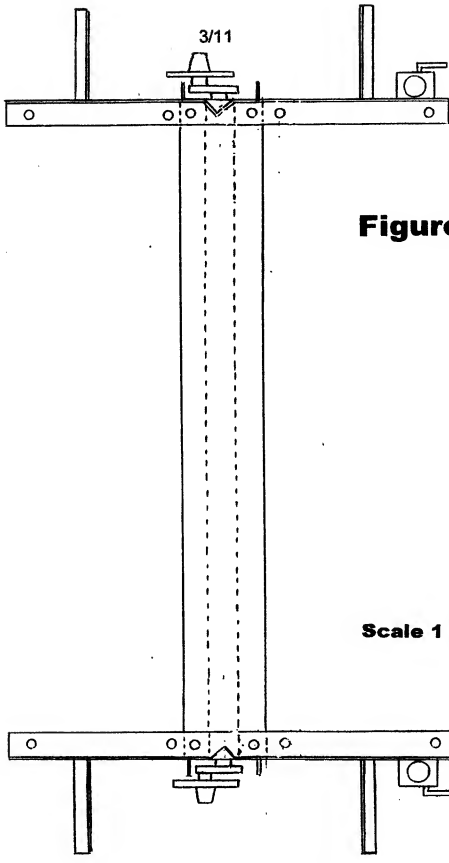


Figure3

Scale 1 = 6.25

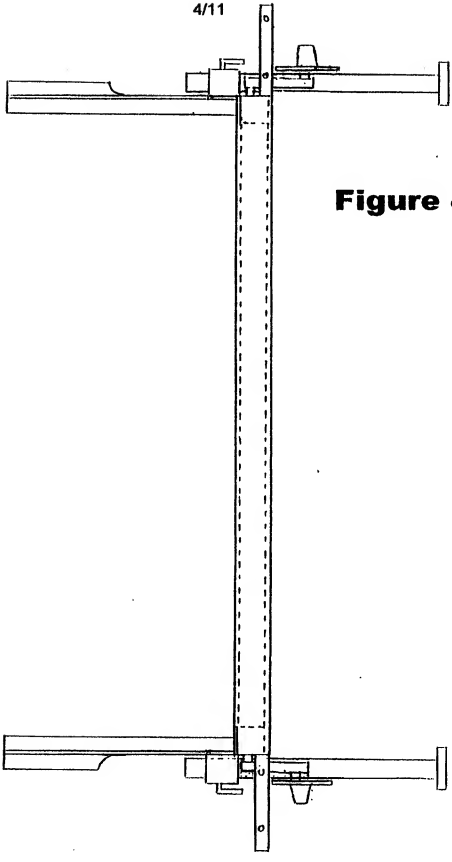


Figure 4

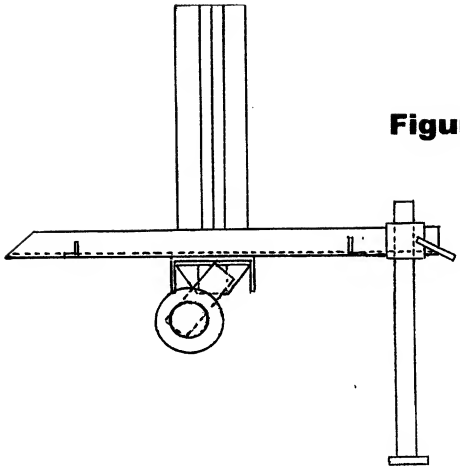


Figure 5

Figure 6

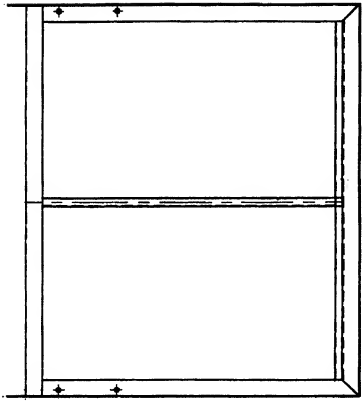


Figure 7

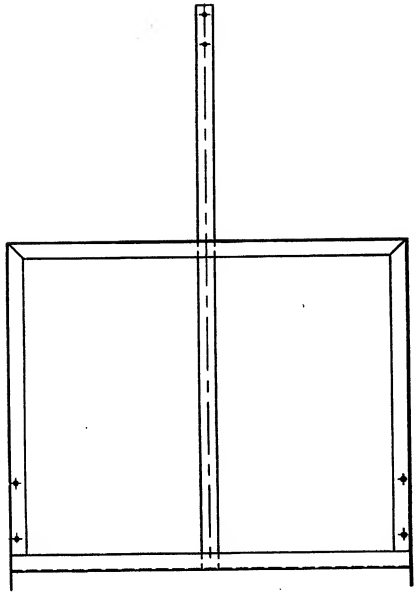


Figure 8

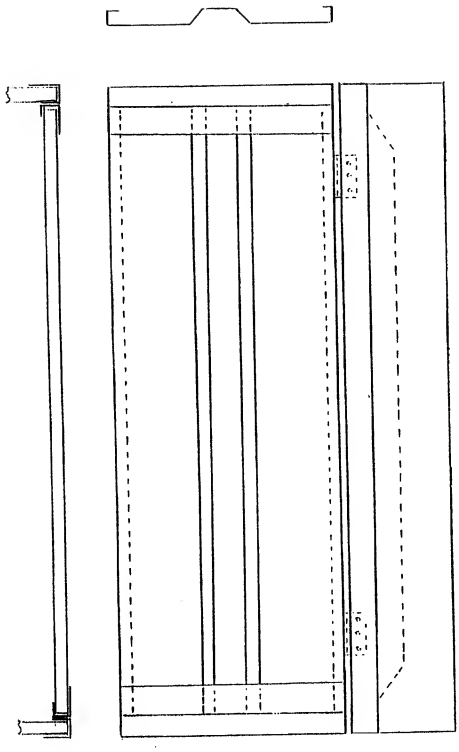


Figure 9

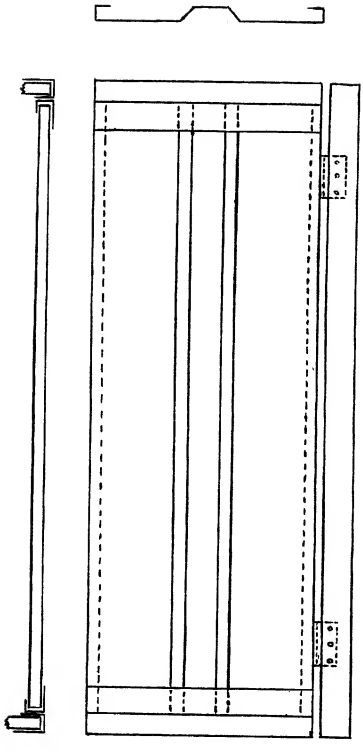


Figure 10

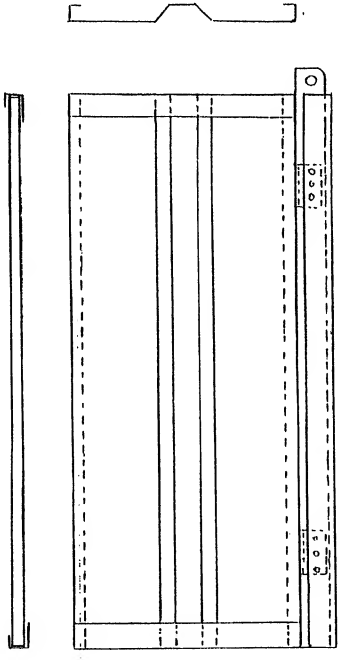
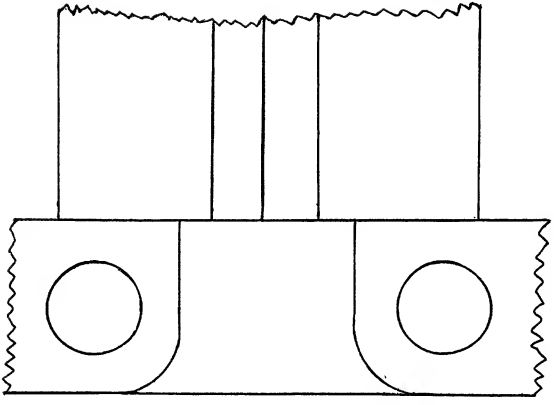


Figure 11



Actual Size

FOLDING TRAILERS

TECHNICAL FIELD

The invention relates to Folding Trailers.

BACKGROUND

Trailers are well known vehicles with many varied uses and by many varied users which include Industry, Farming, Armed Services, Voluntary Organisations, Rescue Organisations and the General Public.
The trailers currently available have a floor fixed to a chassis or a suspension unit.
Trailers that have a gross capacity in excess of 750KG have a braking system operated by the towing vehicle.

ESSENTIAL TECHNICAL FEATURES

The invention provides a centre two wheeled chassis (3,4,5) with two hinged metal floors (6,7) and front and rear end panels (8,9) and four side panels (10).
When not in use the trailer securely folds up for storage. When in use the floor, side and end panels are secured in position for safe trailing.
The trailer comes equiped with an approved lighting board.
The cabling for the lighting board allows for the folding process.
Folding trailers of this design can be made in different sizes.

EXAMPLE

Details of the invention are described by way of example with reference to the accompanying drawings in which:-

Figure 1 show the trailer in position for use.

Figure 2 show the trailer completely folded, secured and stabilizing legs in position.

Figure 3 show the trailer chassis in plan view.

Figure 4 show the trailer chassis in side view.

Figure 5 show the trailer chassis in end view.

Figure 6 show the trailer rear floor panel viewed from below.

EXAMPLE (cont.)

Figure 7 show the trailer front floor panel viewed from below.

Figure 8 show the trailer rear panel in plan, side and end views.

Figure 9 show the trailer front panel in plan, side and end views.

Figure 10 show the trailer side panels in plan, side and end views.

Figure 11 show the trailer floor panel hinge process in front view.

Referring to the drawings the side panels (Figure 10) and end panels (Figures 8 & 9) are held in position for towing by catches (not shown). The floor panels (Figures 6 & 7) are held securely for towing with eight bolts through the floor panels (Figures 6 & 7) into the chassis (Figures 3, 4 & 5).

In order to fold the trailer for storage. First the two stabilizing legs (Figure 2) (No.1) are lowered to prevent the trailer from tipping whilst the folding process is conducted. The eight securing bolts are then removed. The front and rear end panels (Figures 8 & 9) catches are released and the panels folded flat to the floor panels (Figures 6 & 7). The side panels (Figure 10) catches are released and the side panels are folded flat to the floor panels (Figures 6 & 7). The two floor panels are then folded up away from the chassis (Figures 3,4 & 5). The two floor panels (Figures 6 & 7) are secured ready for storage and held in position by catches. See (Figure 2).

CLAIMS

1. A folding trailer comprising a centre wheeled chassis, raising floor panels, hinged side and end panels.
The trailer folds away for storage, requiring less space than when in use.

2. A folding trailer that is fitted with four bolts that act as the hinge process to allow the floor panels to be raised.

3. A folding trailer constructed from galvanised steel for the chassis, the floor panels and the side and end panels.

4. A folding trailer with eight securing bolts holding the floor panels to the chassis for trailing.

5. A folding trailer with eight securing bolts as the only removable parts.

6. A folding trailer with two drop down stabilizing legs for storage when the trailer is not in use.

7. A folding trailer with an approved lighting board, cabling and electrical connection to the towing vehicle.

8. A folding trailer with an approved coupling to the towing vehicle.

9. A folding trailer with eight securing catches for when in use.

10. A folding trailer with two catches used for the folding process.

11. A folding trailer with an approved jockey wheel.

12. A folding trailer with an approved suspension unit.

13. A folding trailer fitted with mudguards.

14. A folding trailer that has seven catch plates for the cover securing luggage elastic.

15. A folding trailer that has a carrying capacity of 460 kilograms.